

NORMAL
mRNA

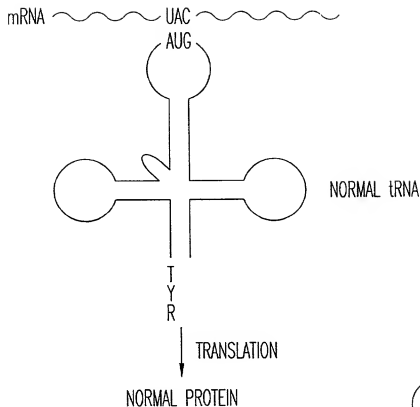


Fig. 1A

MUTANT mRNA
WITH NONSENSE
OCHRE MUTATION

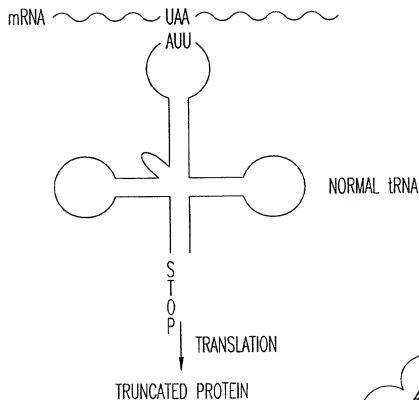
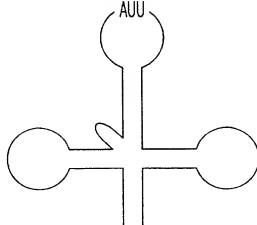


Fig. 1B

MUTANT mRNA
WITH NONSENSE
OCHRE MUTATION

mRNA ~~~~~ UAA

AUU



OCHRE SUPPRESSOR
TYROSINE tRNA

TYR

TRANSLATION

NORMAL PROTEIN

Fig. 1C

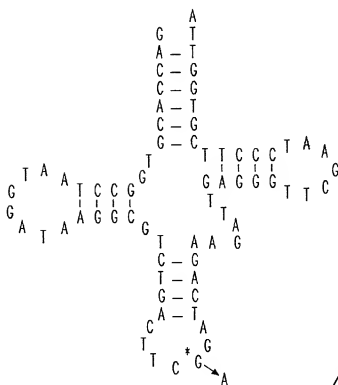


Fig. 2A

10022127, 1003001

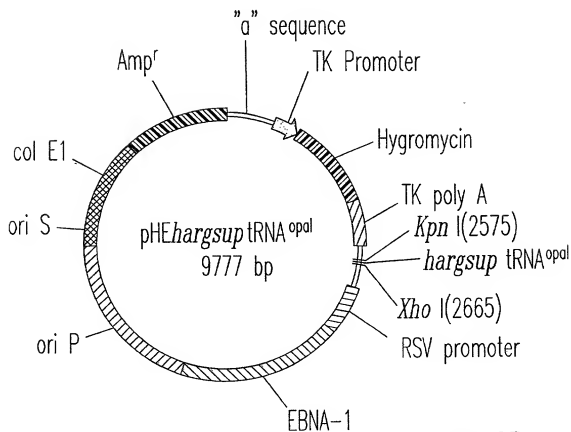


Fig. 2B



Fig. 3A

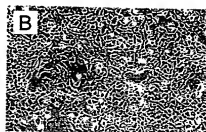


Fig. 3B

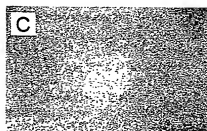


Fig. 3C

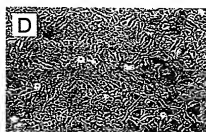


Fig. 3D

A.

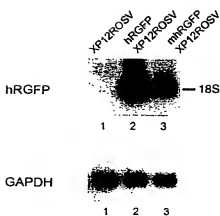


Fig. 4A

B.

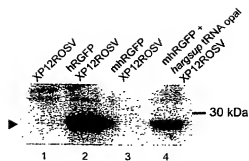
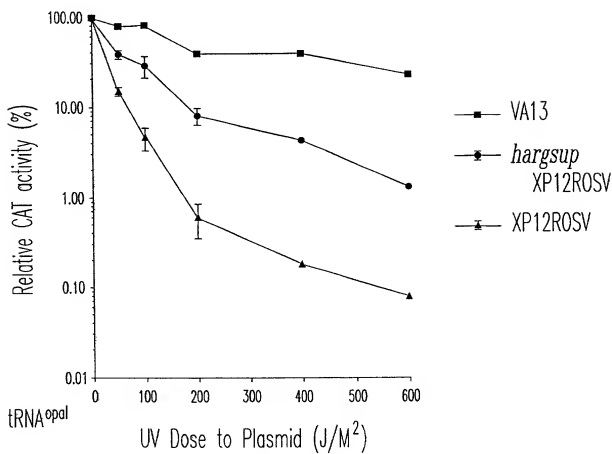
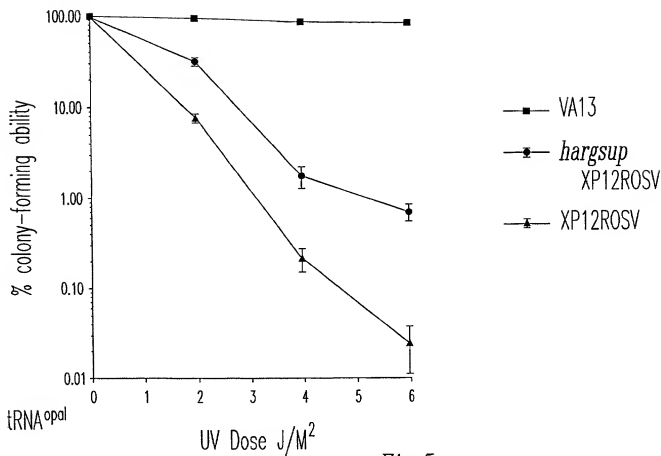


Fig. 4B



A

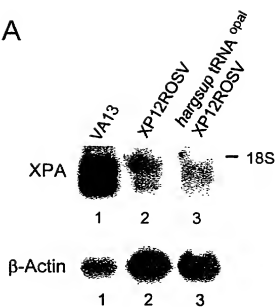


Fig. 7A

B

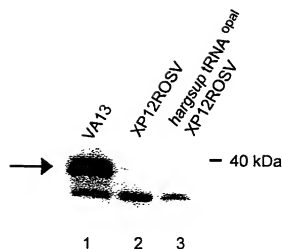


Fig. 7B



Fig. 8A

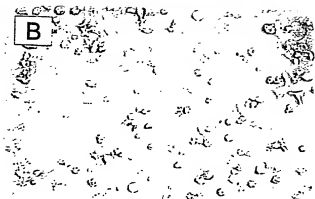


Fig. 8B

pHE 850

Human opal suppressor serine tRNA (using oligos RgP 24/25)

5' - GCGGGTACCACTTAATAAAGACGCGTAGTCGGCAGATTTCGAACCTGCCGGGAGACCCATGATTTTGAAATGCCACTGCCTTAACGACTCGGCCACAGCATACGACGGTGTGGCG

3' - CGCGCACGACGTCAATTTTTTGTGGGGATACAGCGGCTTCAGCTTGGACCTGGACCGCTTCACCTTAACCTTCAGGTAGCGGAATTGTGACCGGGTGGTGTGATGGTCCGACCGCG

Kon I Pvu II

Human amber suppressor serine tRNA (using oligos RgP 18/4)

[illegible]

Human ochre suppressor serine tRNA (using oligos Rgp 73/74)

[illegible]

Ochre Serine

Amber Serine

Opal Serine

Fig. 9

Human Opal/Amber Suppressor Ser tRNA (del CCA at the 3' end)

pHE 850

Human opal suppressor serine tRNA (using oligos RgP24/25)

5' 9cgcgctgacctgtaaaaaagcacgcgctagtcggcgcgcgagattcgaacctgcggggggagacccccacatggatttgaatgtccttcgccttaaccactcggccacgactaccagcttgcggc
 3' cgcccatggtcattttttttttgcggcgcatcagcgcgcttaagcttggacgcgcccctctgggggttaacctaaacttcaggtagcggantggtgacccggtgcatgtctcacgcgc
 Kpn I Pvu II

Human amber suppressor serine tRNA (using oligos 18/4)

5' 9cgcgctgagtaaaaaagcacgcgctagtcggcgcgcgagattcgaacctgcggggggagacccccacatggatttgaatgtccttcgccttaaccactcggccacgactaccagcttgcggc
 3' cgcccatggtcattttttttttgcggcgcatcagcgcgcttaagcttggacgcgcccctctgggggttaacctaaacttcaggtagcggantggtgacccggtgcatgtctcacgcgc
 Xho I Kpn I



Amber Serine

Opal Serine

Fig. 10

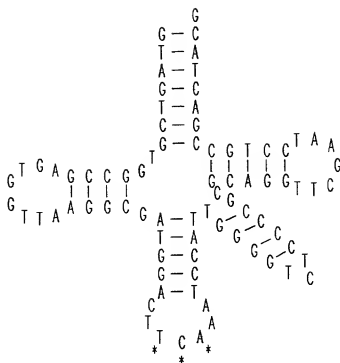


Fig. 13

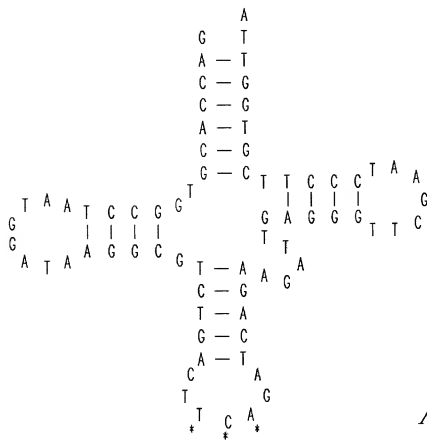


Fig. 14